THE SOCIAL ADAPTATION OF DEAF AND HARD OF HEARING ADOLESCENTS ATTENDING SECONDARY SCHOOLS IN CYPRUS

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ABSTRACT

A large number of case studies within a local as well as at international level have focused on the impact of environmental and social factors on deaf people's psychosocial development and adaptive functioning. Given the importance of the consequences of psychosocial factors on the individual's ability to adapt successfully in the school and the broader social environment, the research has been carried out to evaluate the social adaptation of deaf/hard of hearing (d/hh) adolescents attending secondary schools in Cyprus. For the present study quantitative methods have been used. More specifically, 64 d/hh students filled in (a) the secondary level of the Social Skills Rating System-SSRS (Gresham & Elliott, 1990) and (b) the Loneliness and Social Dissatisfaction Questionnaire (Asher et al., 1984, Galanaki & Kalantzi-Azizi, 1999). The results have shown that d/hh adolescents have a satisfactory level of social adaptation. With regard to the level of loneliness that d/hh adolescents are facing, the results showed that the majority of participants do not exhibit signs of loneliness. The results of the present study have implications for developing supportive programmes and services for all the d/hh children and adolescents, their families and their teaching staff.

INTRODUCTION

A considerable number of studies have focused on the impact of environmental and social factors on deaf people's psychosocial development and adaptive functioning. It has been reported that deaf and hard of hearing (d/hh) children's attending a general school "reflects inclusive educational philosophy and the belief that such settings are likely to enhance educational achievement and personal and social adjustment" (Kent, 2003: 315). However, it has been found that d/hh adolescents experience more depression symptoms, anxiety disorders, and social-emotional behavioural problems than do hearing children (Brunnberg, Linden-Bostrom, & Berglund, 2008). Problems related to loneliness (Most, Ingber, & Heled-Ariam, 2011) and depression (Theunissen et al., 2011) have also been reported within d/hh population. Thus, special emphasis needs to be given to various factors that are associated with improved peer relationships between d/hh children and hearing peers, and can be considered as protective factors in children's adult life. These factors include high self-esteem, good emotion regulation skills, school transition adjustment skills and positive attitudes toward school.

A number of studies (Antia et al., 2011; Bat-Chava & Deignan, 2001; Bat-Chava et al., 2005; Leigh et al., 2009; Most et al., 2011; Roberts & Rickards, 1994; Wolters et al., 2011) have found a significant relationship between social skills (e.g. popularity, relationships, and social interactions) and communication competence (e.g. oral communication, pragmatic language skills, ability to improvise in conversations). Further, social competence were positively related to effective home communication (Leigh et al., 2009; Hadjikakou & Nikolaraizi, 2008), as well as to classroom communication participation (Antia et al., 2011).

Regarding the association between degree of hearing loss and socio-emotional characteristics

research findings are contradictory. Some studies (Cappelli et al., 1995; Martin & Bat-Chava, 2003) have not revealed any associations whereas some others (Roberts & Rickards, 1994; Antia et al., 2011) have found that the degree of hearing loss is related to social behaviours and friendship characteristics. More specifically, children with mild to moderate hearing loss tend to have mostly hearing friends, whereas children with severe to profound hearing loss have both hearing and deaf friends.

A considerable number of studies have revealed an impact of inclusion on d/hh children's social competence (Roberts & Rickards, 1994; Stinson & Liu, 1999; Leigh et al., 2009; Most et al., 2011), with the exception of the study carried out by Wauters and Knoors (2007), which did not find any association between level of inclusion and peer relationships for primary aged d/hh children. In other studies investigating this issue, it was brought out that younger d/hh children in high levels of inclusion with hearing peers had more hearing friends and higher social competence compared with older d/hh children (Roberts & Rickards, 1994; Stinson & Liu, 1999). Musselman, Mootilal and MacKay (1996) found that fully and partially included secondary school d/hh students did not differ between each other on social competence; however, both groups of children differed from d/hh children attending schools for the deaf on their social competence and peer adjustment, as similarly reported by the study carried out by, Wolters and colleagues (2011).

A number of studies investigated the impact of certain characteristics of the hearing peers on d/hh children's social competence and peer relationships in inclusive educational settings. Specifically, in the study carried out by Roberts and Rickards (1994) it was reported that the clarity of the hearing peer's speech was positively related with peer relationships between d/hh and hearing children. Familiarity with d/hh children was another factor with a positive impact on d/hh children's peer relationships (Lederberg et al., 1986, Bat-Chava & Deignan, 2001). Additionally, Bat-Chava and Deignan (2001) found that hearing pupils who invested more effort, patience, and time with their deaf peer were more likely to have positive peer relationships. The aim of the present study was to examine the social adaptation skills of d/hh adolescents who are educated in inclusive school settings in Cyprus. Specifically, the study evaluated d/hh adolescents' social behaviour in the following areas of ability: cooperation, assertion and empathy, using self-ratings, teacher-ratings and parent-ratings. Additionally, the study looked at d/hh adolescents' perceptions of loneliness and social dissatisfaction experienced in a mainstream school context.

METHOD

Participants

Self-report data were collected from 64 d/hh adolescents, receiving their education in general secondary schools in Cyprus, their teachers (n=64) and their parents (n=64). In Cyprus, the total number of d/hh adolescents attending general secondary schools is 92. All d/hh secondary schools students, their teachers and parents were sent the questionnaires and 64 cases responded, reaching a satisfactory 69.56% response rate.

All d/hh students followed an individual educational plan and were trained orally. Most of their school time was spent in the regular classroom, with short withdrawals for specialist attention. The d/hh students who participated in this study did not have any other disabilities. Thirteen of them were profoundly deaf, 22 had severe hearing losses, 20 had moderate, and 9 had mild hearing losses. All children communicated orally with their hearing siblings.

Seventeen fathers (26.56%) and 47 mothers (73.44%) were involved in the study. The majority of them held a university degree (55%), was married (77.42%) and had a medium annual

income (51.62%). Most participating teachers were female (85.94%) and were aged between 31 and 40 years old (53.1%). Their teaching experience with d/hh pupils ranged between 1 to 10 years (M = 2.76, S.D. = 2.34), whereas their general teaching experience ranged between 2 to 32 years (M =11.67, S.D. = 6.59).

Instrumentation

The Social Skills Rating System (SSRS) for adolescents, parents and teachers (Gresham & Elliott, 1990) was used in the study in order to evaluate student's social skills such as *cooperation*, *assertion* or *empathy*. Additionally, the teacher form provides frequency ratings of potential externalizing/internalizing problem behaviors. All SSRS items are evaluated with a 3-point scale (0=Never, 1=Sometimes, 2=Very Often). Cronbach's alphas for the three SSRS Forms (adolescent, parent and teacher) in this study were .76, .77 and .78 respectively.

D/hh students also filled in the Loneliness and Social Dissatisfaction Questionnaire (Asher et al., 1984, Galanaki & Kalantzi-Azizi, 1999) which consists of 21 items evaluated with a 3-point scale (1=Yes, 2=Sometimes, 3=No). The Cronbach's alpha for this questionnaire in this study was .66.

Procedure

The researchers, after having obtained written permission by the Cyprus Ministry of Education and Culture, sent to the head teachers of all 62 secondary general schools in Cyprus with d/hh children an envelope containing the questionnaires for the parents, the students and their teachers. Additionally, a cover letter asking the head teachers to distribute the questionnaires to the addressees, and when filled in to send them to the researchers, was attached. A paid envelope with the researchers' address was also sent. Confidentiality procedures were strictly followed. Participants gave informed consent, prior to data collection.

RESULTS

Table 1 presents mean scores and standard deviations of the participants' (d/hh students, their parents and teachers) responses to the Social Skills Rating System (SSRS)

The results show that d/hh children's social skills are above average and they are rather satisfactory.

Table 1: Parents', teachers' and children's responses for the 'Social Skills' sub-scales of the SSRS

	Teachers (n=64)		Parents (n=64)		Children (n=64)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Co-operation	1.52*	0.33	1.18	0.30	1.52	0.33
Assertion	1.18	0.42	1.15	0.39	1.45	0.28
Self-control	1.62	0.33	1.27	0.29	1.25	0.32
Total social scales	*1.44*	*0.25*	*1.20*	*0.22*	*1.40*	*0.26*

*Scores range from 0 to 2, with higher mean scores representing more positive responses.

Non-parametric comparisons (Kruskal-Wallis test) between the mean ranking of parents', teachers' and d/hh students' responses showed no significant differences, indicating that parents' and teachers' perceptions of the d/hh adolescents' social skills tend to be in line with d/hh adolescents' own perceptions.

Additionally, a correlational analysis, using Spearman's *rho,* showed significant positive correlations between parents', teachers and d/hh adolescents' perceptions regarding adolescent social skills.

Table 2: Correlation coefficients between child, teacher and parent ratings on the 'Social Skills' of the SSRS

	SSRS-C	**SSRS-P**
SSRS-C		
SSRS-P	.577**	
SSRS-T	.280*	.498**

* The correlation is significant at the 0.05 level.

** The correlation is significant at the 0.01 level.

Table 3 presents teachers' scores on the sub-scales of the 'Problem Behaviours' domain (SSRS-Teacher Form). It is apparent, that according to the teachers, d/hh students do not face any serious behavioural problems, since their scores are lower than the mean of 1 on the SSRS-T subscales *internalizing problems* and *externalizing hyperactivity problems.*

Table 3: Teachers' responses for the 'Problem Behaviours' sub-scales of the SSRS-T

	Mean	S.D.	Minimum	Maximum
Internalizing	0.33	0.46	0.00	1.83
Externalizing	0.52	0.43	0.00	1.83

*Scores range from 0 to 2, with lower mean scores representing more positive responses

It was also found that participants experience relatively low levels of loneliness and social dissatisfaction (*M*=36.78, *SD*=4.14, *Min*=25, *Max*=42) within the school context. (Table 3).

DISCUSSION

The present study sought to examine the social adaptation skills of d/hh adolescents in inclusive school setting in Cyprus. The results showed that d/hh students who receive their education in mainstream schools appear to have developed positive social behaviours and they do not experience loneliness or peer rejection, according to their responses. Similarly, teachers and parents seem to agree that d/hh adolescents do not exhibit difficulties in social adaptation and social behaviour in their relationships with peers and teachers. These findings are in line with previous research data suggesting that d/hh children can benefit from being educated in inclusive schools, and not in special schools, as the general school can provide all students with

many opportunities to develop socially and cope with difficulties in every day peer relationship problems (Bat-Chava & Deignan, 2001; Kent, 2003).

A major limitation of the present study is that it did not compare d/hh and hearing students' social adaptation skills as well as it did not include d/hh adolescents who attend special schools for the deaf. An additional restriction of this study is that it does not look at associations between d/hh students' social skills and demographic factors such as age, parental socioeconomic background, and use of hearing aid or type of communication at school and home. Future studies, including control groups of participants and possibly additional psychometric measures of social adaptation competence in inclusive settings, should focus on investigating the impact of a number of psycho-emotional, social and cognitive characteristics in both d/hh and hearing students' social development. Nevertheless, the present findings could be important for education policy makers in Cyprus in terms of empowering general schools which include students with special educational needs.

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